

Homework 9

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1 Page 385: problem 1 a

Using the definition provided for the movement diagram, determine whether the following zero-sum games have a pure strategy Nash equilibrium. If the game does have a pure strategy Nash equilibrium, state the Nash equilibrium. Assume the row player is maximizing his payoffs which are showing in the matrices below.

		Colin	
		C1	C2
Rose	R1	10	10
	R2	5	0

2 Page 385: problem 1 c

Using the definition provided for the movement diagram, determine whether the following zero-sum games have a pure strategy Nash equilibrium. If the game does have a pure strategy Nash equilibrium, state the Nash equilibrium. Assume the row player is maximizing his payoffs which are showing in the matrices below.

		Colin	
		C1	C2
Rose	R1	1/2	1/2
	R2	1	0

3 Page 404: problem 2 a

For problems a-g build a linear programming model for each player's decisions and solve it both geometrically and algebraically. Assume the row player is maximizing his payoffs which are showing in the matrices below.

		Colin	
		C1	C2
Rose	R1	10	10
	R2	5	0

4 Page 413: problem 3

We are considering three alternatives A, B, and C under states of nature 1, 2, 3, and 4, set up and solve both the investor's and nature's game:

Table 1: My caption

States of Nature		Table 11.10.10			
Investor's choices	Condition #1	Condition #2	Condition #3	Condition #4	
Alternatives					
A	1100	900	400	300	
B	850	1500	1000	500	
C	700	1200	500	900	

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6 Page 428: problem 3

7 Page 440: problem 2

8 Page 454: problem 3